

AMENDMENT

Please amend the application without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents as follows.

In the Claims

- 1-15. (Cancelled)
16. (Currently amended) A method for identification or validation of a nucleotide sequence of interest (NOI) useful in the treatment of pain comprising
- (i) delivering a test NOI to a cell *in vitro*;
 - (ii) analyzing the effect of the test NOI on ~~pain avoidance or relief~~ cell resting membrane potential or excitability *in vitro*;
 - (iii) delivering the test NOI to a target cell in a subject;
 - (iv) analyzing perception and/or transmission of pain in the subject; and
 - (v) selecting an NOI with therapeutic potential,
- thereby identifying or validating an NOI useful in the treatment of pain.
17. (Previously presented) The method according to claim 16, wherein step (iv) comprises monitoring NOI-induced modulation of a transcriptome and/or proteome of the target cell.
18. (Previously presented) The method according to claim 16, wherein the target cell is a DRG cell.
19. (Cancelled)
20. (Previously presented) The method according to claim 18, wherein the DRG cell is *in situ*.
- 21-24. (Cancelled)